

REMARKS

In section 2 of the Office Action, the Examiner rejected claims 78-101 under 35 U.S.C. §112, second paragraph as being indefinite.

Specifically, the Examiner asserts that the specification of the present application discloses that the map contains information indicating location of first and second 8 VSB data in a frame, whereas the amended claims recite that the map contains information indicating location of first and second differently coded data in the frame. The Examiner then asserts that it is not clear to which data the differently coded data refers.

Page 35, lines 6-15 disclose that each data frame may contain a mix of robust VSB data segments and ATSC non-robustly coded data segments, that the robust VSB data may in turn contain data coded with a mix of coding rates, and that the map indicates which segments are robust VSB coded and which outer code is used for the robust VSB coding. Page 10, lines 10-15, and page 19, lines 11-13, for example, disclose the robust and non-robust coding rates, respectively. As can be seen,

various frames may contain various mixes of robust data and non-robust data.

As described elsewhere in the application, auxiliary data is robustly coded as robust data and is referred in the application as RVSB data (see, for example, page 3, lines 5-8). Non-robust data is referred to in the application as ATSC data.

More specifically, as described in the application in relation to Figure 1, ATSC data is supplied directly to the mux 24. Auxiliary data, however, is first outer coded as robust data by an outer coder 20 before being supplied to the mux 24. Then, both the robust data and the ATSC data are trellis coded and mapped as 8 VSB data by the 2/3 rate inner encoder 32 (Figure 1 and Figure 4).

Therefore, auxiliary data (i.e., RVSB data) is both outer coded and inner coded, whereas the ATSC data is only inner coded. Accordingly, the robust (RVSB) data and the ATSC data are differently coded, the RVSB data being coded more heavily than the ATSC data.

As further described in the application in relation to Figure 11, auxiliary data may also be coded at different coding rates. For example, some auxiliary data may be outer coded by a 1/4 rate outer coder 174

before being inner coded, other auxiliary data may be outer coded by a 1/2 rate outer coder 176 before being inner coded, and still other auxiliary data may be outer coded by a 3/4 rate outer coder 178 before being inner coded.

Therefore, auxiliary data (i.e., RVSB data) may be differently coded with respect to each other and further with respect to ATSC data.

The application makes it clear that a frame can contain any mix of this ATSC and/or RVSB data in a frame. For example, one frame may contain a mix of 1/4 rate coded robust data and ATSC non-robust data, another frame may contain a mix of 1/2 rate coded robust data and ATSC non-robust data, still another frame may contain a mix of 1/4 rate coded robust data, 1/2 rate coded robust data, and ATSC non-robust data, and yet another frame may contain a mix of 1/4 rate coded robust data and 1/2 rate coded robust data (with no ATSC non-robust data). Of course, it is also possible for a frame to contain only ATSC data, or only 1/4 rate coded data, or only 1/2 rate coded data.

As discussed above and at page 35 of the application, the map is used to indicate the location of

the various mixes of this differently coded data in a frame.

Accordingly, the rejected claims are not only definite on their face, but they are also definite when read in light of the specification and drawings of the present application.

For the reasons give above, claims 78-101 are definite and satisfy the requirements of under 35 U.S.C. §112, second paragraph.

CONCLUSION

In view of the above, it is clear that the claims of the present application are definite. Accordingly, allowance of these claims and issuance of the above captioned patent application are respectfully requested.

Respectfully submitted,

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